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REMARKS

This communication is in response to the Office Action mailed on November 22, 2005 and in response to a telephone interview scheduled with the examiner on January 12, 2006. The examiner is thanked for his time and helpful comments made during the interview. In the Office Action, claims 1-25 and 28-33 were pending of which all were rejected.

The Office Action in the section entitled "response to amendment" states that applicant has not officially challenged the official notice taken with respect to claims 21-22 regarding the use of a small word penalty and a last letter insertion/deletion. It is noted that claims 21-22 depend on independent claim 14. As discussed in further detail below, it is believed that claim 14 is patentable over the cited art, in which case, claims 21-22 would be patentable based on the scope of claim 14.

The Office Action next reports that claims 1-4, 9, 11-20, 24-25, and 28-33 were rejected under 35 U.S.C. §103 (a) as being unpatentable over U.S. Patent 6,018,736 to Gilai et al. (hereinafter Gilai) in view of U.S. Patent No. 5,828,991 to Skiena et al. (hereinafter Skiena), and in further view of U.S. Patent No. 5,953,541 to King et al.

Claim 1 recites a method for spell checking an intended word entered using a reduced keypad, where each of one or more input keys of the reduced keypad is mapped to a plurality of letters, the method comprising: for an entered key input corresponding to an entered misspelled word and at least one of a left context and a right context, finding one or more potential non-corresponding words from a dictionary of words based on a cost, where each potential non-corresponding word has a key input that does not match the key input of the entered misspelled word, and wherein the cost between the key input of the entered misspelled word and the non-corresponding potential word is less

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than or equal to a maximum cost; and determining a probability for the one or more potential non-corresponding words based on the at least one of a left context and a right context using a language model trained in part using words previously entered in a cache; and presenting at least one of the one or more potential non-corresponding words as the intended word based on probability. [emphasis added]

During the interview, Gilai was discussed in some detail. The applicant's representative opined that Katherine, Catherine, etc. [See Col. 7, lines 22-35] were only similar in meaning and didn't necessarily have the same number of keystrokes, and thus, were not "non-corresponding" as recited in claim 1. The examiner's position was that, broadly speaking, words such as Katherine, Catherine, Cathyrine, etc. are "non-corresponding" words when compared to input word "Catherine" because they have key inputs that do not match the key input of the entered word "Catherine". The examiner suggested that claim 1 be further amended to clarify that the entered word has been misspelled. In response, claim 1 has been amended so that the entered word is "misspelled". Thus, claim 1 is presented for reconsideration and favorable action.

Further, as discussed in the interview, it is believed that the cited combination of Gilai, Skeina, and King is not obvious. According to MPEP 2143, three basis criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be

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found in the prior art, not in applicant's disclosure. In re Vaack, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In the present Office Action, three references (Gilai, Skeina, and King) have been combined to assert that claim 1 is obvious, and thus, not patentable. However, it is respectfully submitted that the combination of Gilai, Skeina, and King has been proposed without an explanation regarding any suggestion or motivation to combine and/or modify the references. Also, it is noted that the present inventions generally relate to spell-checking words entered with a reduced keypad where a key can represent more than one character such as an "ABC" or "DEF" key. In other words, the key input is ambiguous.

In contrast, the primary reference, Gilai, discloses a database accessing system for responding to ambiguous queries and includes a dictionary of database words, a dictionary searcher and a databases searcher. Gilai can also include a reduced keypad [See FIG. 9] for entering text. The Gilai database accessing system includes a similar word finder operative that can find similar words to an interpretation of a word entered by the user. [abstract] Gilai includes similarity scores to select potential similar words. As discussed in the interview, it is believed that these similar words are similar based on meaning, such as "Katherine," "Catherine," and "Cathyrine" and not based on a comparison of the key input between a misspelled word and non-corresponding (but correctly spelled) words. Further, as discussed in the interview, it is believed that one purpose of the Gilai system is to enable a user to enter a word such as "Catherine" and retrieve data listed under the entire dictionary entry, which includes "Catherine" and similar words.

Secondary reference Skiena discloses a system and method of reconstructing sentences entered using a reduced keyboard such as a telephone keypad using word ambiguity resolution. It is believed that the Skiena system and method requires that the

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entire sentence be entered first with symbols placed between words in order segment individual words. (See FIGS. 3 and 7) A word trellis or lattice is constructed with possible words or tokens corresponding to each entered word. (abstract) Paths through the lattice represent possible sentence reconstructions. (abstract) A Viterbi algorithm is used to decode or select paths based on probability. (Col. 9, lines 9-11)

Another secondary reference King discloses a system for disambiguating ambiguous input sequences by displaying objects associated with the generated input sequences in the order of decreasing frequency of use. The Office Action refers to reference King to contend that King teaches the ability to train language data based on words entered into a cache.

It is noted that Gilai, Skeina, and King may share a common feature of receiving or disambiguating ambiguous key input. However, it is believed that none of the references cited relate directly to spell-checking. Instead, the cited combination proposes to modify Gilai with features ostensibly found in Skeina and King. However, it is believed that the proposed modification is not obvious due to changing a principle of operation of the primary reference and/or rendering the primary reference unsuitable for its intended use. Finally, it is believed that the cited combination does not teach or suggest all of the features of claim 1 at least because the combination does not perform spell-checking.

In light of the foregoing, it is believed that claim 1 is patentable over cited art. Claims 2-13 depend on claim 1 and are believed to be separately patentable. Reconsideration and allowance of claims 1-13 are respectfully requested. Claim 14 is similar in scope to claim 1. Thus, remarks relating to claim 1 are incorporated herein. Claims 15-23 depend on claim 14 and are believed to be separately patentable. Reconsideration and allowance of claims 14-23 are respectfully requested.

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The Office Action reports that claim 24 was rejected in a similar basis as claims 1 and 14. The remarks above are incorporated by reference. In light of the foregoing remarks it is believed that claim 24 is patentable over the cited art. Claims 25-33 depend on claim 24 and are believed to be separately patentable. Reconsideration and allowance of claims 24-33 are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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